## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER U-R-14-41 Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

## AB VOLVO PENTA

Pursuant to the authority vested in the Air Resources Board at Sections 43000.5, 43013, and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following diesel engines and exhaust emission control systems produced by the manufacturer are certified as described below for use in heavy-duty off-road equipment:

Model Year: 2000

Typical Equipment Usage: Generator Set

Engine Power Ratings Range: 175 - 750 horsepower, inclusive

Fuel Type: Diesel

	Displacement		Exhaust Emission Control
Engine Family	<u>Liters</u>	Cubic Inches	Systems and Special Features
YVPXL07.3ABB	7.3	445	Turbocharger
(TWD740GE)			Charge Air Cooler
			Smoke Puff Limiter
			Electronic Control Module

The engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The exhaust emission certification standards and certification values in grams per brake horsepower-hour (g/bhp-h) for total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

	<u>Exha</u> u	Exhaust Emissions (g/hp-h)			Smoke Opacity (%)		
Standard Certification	<u>THC</u> 1.0 0.2	<u>CO</u> 8.5 0.6	<u>NOx</u> 6.9 5.8	<u>PM</u> 0.4 0.1	<u>Accel</u> 20 	<u>Lug</u> 15 5	<u>Peak</u> 50

BE IT FURTHER RESOLVED: That the listed engine models comply with "Exhaust Emission Standards and Test Procedures -- Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels --1996 and Later Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 *et seq.*).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this

day of March 2000.

R. B. Summerfield, Chief

Mobile Source Operations Division

## Engine Model Summary Form

Manufacturer: AB Volvo Penta

Engine category: Nonroad CI

EPA Engine Family: YVPXL07.3ABB

Mfr Family Name: TWD740GE

Process Code: New Submission

ntrol J1930	1	<u>3</u>	
9.Emission Control Device Per SAE J1930	C CAC 5PL	99 TC, CAC, SPL, ECM	
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930		)L 66	
7.Fuel Rate: mm/stroke@peak torque	169@873	165@841	
6.Torque @ RPM (SEA Gross)	873@1500	841@1800	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	84	66	
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only)	169@249	165@288	
3.BHP@RPM (SAE Gross)	249@1500	288@1800	
2.Engine Model	TWD740GE 249@1500 169@	TWD740GE	
1.Engine Code 2.Engine Model	YVPXL07.3ABB	YVPXL07.3ABB	

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